Vaginal Foreign Bodies and Child Sexual Abuse: An Important Consideration

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Vaginal foreign bodies are a complaint occasionally encountered in pediatric clinics and emergency departments, and when pediatric patients present with a vaginal foreign body sexual abuse may not be considered. We describe two children with vaginal foreign bodies who were found to have been sexually abused. Each child had a discharge positive for a sexually transmitted infection despite no disclosure or allegation of abuse. We recommend that all pre-pubertal girls who present with a vaginal foreign body should be considered as possible victims of sexual abuse and should receive a sexual abuse history and testing for sexually transmitted infections. [West J Emerg Med. 2013;14(5):437–439.]

INTRODUCTION

Child sexual abuse is a significant problem in the United States. Estimates are that each year approximately 1% of children will experience some form of sexual abuse, which will result in up to 25% of girls and 10% of boys being victimized by an inappropriate sexual experience.[1] Children who have been exposed to sexual abuse are known to exhibit a greater number of sexualized behaviors, such as masturbating with an object or inserting objects into the vagina or anus.[2]

It has been reported that approximately 4% of pre-pubertal girls with a genital complaint will have a vaginal foreign body, and that a vaginal foreign body will be found to be the cause of the complaint in 18% of those with a vaginal discharge and up to 50% with vaginal bleeding.[3] The majority of vaginal foreign bodies are found between the ages of three and nine, and the most common object identified is a wad of toilet paper, which is found in up to 80% of cases.[4] The classic symptoms of vaginal foreign bodies are vaginal bleeding and a blood-stained vaginal discharge. The history is rarely helpful because the insertion is frequently not witnessed by an adult nor does the child usually disclose putting an object into the vagina. Foreign bodies have been reported to be inserted by children because the genital area may be pruritic, the children may be exploring their bodies, or it is a behavior related to sexual abuse.[5]

Sexually transmitted infections (STI) are a rare cause of vaginal discharge in pre-pubertal girls. Estimates are that 5% of at risk children will be infected with an STI. In sexual abuse cases, *Neissesia gonorrhoeae* has been estimated to be found in 3.3%, *Chlamydia trachomatis* in 3.1%, *Trichomonas vaginalis* in 5.9% and *Treponema pallidum in* 0.3%.[6] In cases presenting as suspected sexual abuse, it is common practice to obtain studies to evaluate a vaginal discharge for an STI; however, there are no current recommendations to obtain cultures of the vaginal discharge associated with vaginal foreign bodies.[1]

We describe 2 cases of patients with vaginal foreign bodies who were found to have positive cultures for an STI. In both cases, the children initially presented to the pediatric emergency department (PED) with a chief complaint of a vaginal discharge, and in neither case was sexual abuse a parental concern.

CASE REPORTS

Case 1

A 4-year-old girl presented to the PED at the University of Maryland Children's Hospital (UMMC) with a chief complaint of vaginal itching for 2 weeks and a vaginal discharge for 2 days. When directly questioned by her mother and the emergency physician (EP), the girl denied being touched in the genitourinary area. Her mother reported that the discharge was initially white, but over the next two days it became malodorous and green.

Her physical examination in the PED was noteworthy for erythema of the labia majora and a copious greenish-white vaginal discharge. A foreign body was suspected, and vaginal

irrigation revealed a small piece of foreign material, believed to be toilet tissue, which was removed. Chlamydia and gonorrhea cultures of the vaginal discharge were obtained, and the child was discharged from the PED with instructions to follow up with her pediatrician if the discharge persisted.

Six days later the PED was notified that the culture of the vaginal discharge was positive for *N. gonorrhea*. The family was contacted and the child was referred to the Sexual Abuse & Rape Assessment (SARA) Center at the UMMC for further evaluation and treatment. Further history revealed persistence of the vaginal discharge, which had now taken on a more prominent greenish color. Her exam was otherwise unchanged from the initial presentation, and the child was treated with a single dose of IM Ceftriaxone. The case was then referred to the local child advocacy center (CAC) for further evaluation of sexual abuse.

Case 2

A 6-year-old girl presented to the PED with a chief complaint of a green vaginal discharge for 6 days. The girl's father reported that 6 days prior to the evaluation, the child complained of pain and itching in the vaginal area and developed a yellowish-brown vaginal discharge. Over the course of the week, the discharge had changed in color from yellowish-brown to green but had no odor. When directly questioned by her father and the EP, the girl denied any inappropriate touching.

Her physical examination in the PED was noteworthy for vulvar erythema and a copious, milky, yellow-green discharge. In addition, a whitish foreign body, which appeared to be a wad of toilet tissue, was visualized and extracted from the vagina. Cultures of the vaginal discharge were obtained, and the child was discharged from the PED with instructions to follow up with her pediatrician if the discharge persisted.

Four days later the PED was notified that the culture of the vaginal discharge was positive for *N. gonorrhea*. The family was contacted and the child was referred to the SARA Center at the UMMC for further evaluation and treatment. Further history revealed persistence of the vaginal discharge, which was now more yellow in color, and the child was treated with Ceftriaxone. The case was then referred to the local CAC for further evaluation of sexual abuse.

DISCUSSION

The 2 children described above presented to the PED because of a vaginal discharge associated with a vaginal foreign body. In both cases, cultures of the vaginal discharge were positive for *N. gonorrheae* and the foreign bodies were determined to be associated with sexual abuse. Despite having forensic interviews at the CAC, neither child provided details on how the foreign body entered the vagina, and both children denied any history of sexual contact.

It has been estimated that 4 to 5% of all pre-pubertal girls who present for medical care with a vaginal complaint will have a vaginal foreign body.[3] The most common vaginal foreign body in a pre-pubertal girl is toilet tissue; however, toys, safety pins and other small objects have been reported.[7-9] Foreign bodies in the vagina can cause intense local irritation and inflammation, producing the classic symptoms of vaginal bleeding and a foul smelling, often greenish or blood-tinged vaginal discharge.[7,10] Of the classic symptoms, vaginal bleeding has been reported to be the most sensitive and specific symptom for a vaginal foreign body, with reports indicating that 93% of pre-pubertal girls with a vaginal foreign body will present with vaginal bleeding or a blood-tinged vaginal discharge, and 82% of pre-pubertal girls with vaginal bleeding will have a vaginal foreign body.[7]

Vaginal discharge is also a common finding in patients with a vaginal foreign body occurring in more than 18% of patients.[7] However, vaginal discharge as a general complaint is a common gynecologic problem in pre-pubertal girls, accounting for more than 70% of all gynecologic concerns in young girls.[4] Because pre-pubertal girls are not naturally exposed to STI, pediatricians and EPs often do not consider them as a possible cause for a vaginal discharge.

Children rarely recount how the foreign body was inserted, who inserted it, or what motivated the insertion.[11] Reports have previously stated that the majority of these objects are inserted by the child during natural exploration of the body or during masturbatory play.[7,12,13] Normal masturbation, however, is believed to involve clitoral and labial manipulation, not penetration of the vagina by objects.[14] In addition, the pre-pubertal hymen is very sensitive to touch, and inserting an object past the hymen is likely to cause pain and discomfort. It is also known that children who have been exposed to sexual abuse will exhibit a greater number of sexualized behaviors, including inserting objects into the vagina or anus.[2,10] Therefore, the presence of any vaginal foreign body in a pre-pubertal girl should elicit concern for sexual abuse.

The majority of the review articles on vaginal foreign bodies and the major emergency medicine, pediatric emergency and gynecology texts have limited the discussion to the types of foreign bodies and methods of extraction rather than etiologies, such as sexual abuse.[5,15,16] A report by Herman-Giddens found that 11 of the 12 pre-pubertal girls being evaluated for vaginal foreign bodies were either suspected or confirmed victims of sexual abuse. In that report, 8 of the girls were able to identify specific perpetrators.[11] Strickler stated that "sexual abuse must be considered when it is not known who inserted the foreign body." In Strickler's report, more than 1 in 4 of the vaginal foreign bodies were found to be inserted by someone other than the patient.[10] Our report is different from previous studies in that these children presented directly to an ED, not a CAC, for evaluation of the vaginal discharge, and none of the foreign bodies visualized were sexual in nature.

The ideal evaluation of children who are suspected of having been sexually abused has been well documented in

practice statements developed by the American Academy of Pediatrics. Testing pre-pubertal children for STIs is indicated when a victim is symptomatic (ex. discharge or lesions), a history of genital to genital contact has occurred, or if the perpetrator is known to have a sexually transmitted infection.[1,17-19] Unfortunately, the ideal evaluation of children who present with symptoms consistent with a vaginal foreign body and a vaginal discharge is less well documented. In the Herman-Giddens study, they did a retrospective review of all English-language vaginal foreign body case reports over the preceding 100 years and found more than 109 cases of vaginal foreign bodies involving 100 pediatric patients; however, only two of the patients in the reports were evaluated for sexual abuse.[11] From this data it could be speculated that despite a clear association between vaginal foreign bodies and sexual abuse, the majority of clinicians (both pediatric and emergency) do not consider sexual abuse when evaluating vaginal foreign bodies.

RECOMMENDATIONS

An association exists between child sexual abuse and vaginal foreign bodies, and the traditional assumption that pre-pubertal girls naturally place foreign bodies in the vagina may not be valid. Pediatricians and emergency clinicians need to be alert to this high risk possibility and should consider all pre-pubertal girls who present with a vaginal foreign body to be potential victims of sexual abuse. These pediatric patients should receive a thorough history for sexual and psychosocial factors, with potential consultation with child sexual abuse experts. In addition, all pre-pubertal patients with a vaginal foreign body should be tested for STIs using the most sensitive and specific methods available, as diagnostic results of an STI may be the only indicator that sexual abuse has occurred.

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